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Cat. No. 14-1224

OWNER'S MANUAL

Please read before using this equipment.

SCP-83

Auto-Reverse AM•FM Stereo Cassette Player

OPTIMUS®

FEATURES

Your Optimus SCP-83 Auto-Reverse AM•FM Stereo Cassette Player is a lightweight, portable AM/FM radio with a cassette player and built-in speaker. You can enjoy cassette tapes or the radio with others through the built-in speaker or you can connect stereo headphones (not supplied) for private listening.

Its features include:

Automatic Frequency Control (AFC) — automatically keeps the radio's receiver tuned to the selected broadcast frequency.

Auto-Reverse Play — automatically plays the other side of the tape when the side currently playing ends, for continuous playback.

Extended Bass On/Off Switch — lets you increase your music's bass sound.

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Direction Switch — lets you change the tape's direction to play the other side without removing the tape from the cassette player.

Built-In Speaker — lets you share the music with friends.

Three Power Sources — let you power the SCP-83 from two AA batteries, standard AC power (requires an AC adapter), or a vehicle's DC power (requires a DC adapter).

Removable Belt Clip — allows hands-free carrying so you can take the SCP-83 anywhere you go.

Note: To listen to your SCP-83 privately or in stereo, you need a pair of headphones or amplified speakers (not supplied) with a 1/8-inch mini plug. Your local RadioShack store sells a wide variety of headphones and speakers.

Read this manual completely to learn about all the features of your SCP-83.

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PREPARATION

You can power your SCP-83 from any of these power sources:

- Internal battery power
- Standard AC power (using an AC adapter)
- Vehicle battery power (using a DC adapter)

USING INTERNAL BATTERY POWER

You can power the SCP-83 from two AA batteries (not supplied). For the best performance, we recommend alkaline batteries, such as RadioShack Cat. No. 23-557. Follow these steps to install batteries.

1. Press down on the battery compartment cover and slide it off in the direction of the arrow.
2. Install the batteries as indicated by the polarity symbols (+ and –) marked next to the compartment, with the back battery over the ribbon.

   Cautions:

   - Use only fresh batteries of the required size and type. Never mix fresh and old batteries or different battery types.
   - Always dispose of old batteries promptly and properly.
3. Replace the cover.

Notes:

- If the sound gets distorted or weak, replace the batteries.
- If you do not plan to use the SCP-83 for a week or more, or if you plan to power it using only an AC or DC adapter, remove the batteries. Batteries can leak chemicals that corrode or damage electronic circuits.

USING AC POWER

You can power the SCP-83 from AC power using an optional AC adapter, such as RadioShack Cat. No. 273-1654.

Cautions:

- The recommended AC adapter supplies 3 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the SCP-83's **DC 3V** jack. Using an adapter that does not meet these specifications could damage the SCP-83 or the adapter.
- Be sure the adapter is connected to the SCP-83 before you connect it to the AC outlet and that you disconnect the adapter from the AC outlet before you disconnect it from the SCP-83. Otherwise, the unconnected plug might touch some metal and damage the adapter.

Follow these steps to power the SCP-83 from a standard AC outlet.

1. Set the adapter's voltage switch to 3V.
2. Insert the adapter's 3.4 mm outer diameter/1.3 mm inner diameter barrel plug into the adapter's cord so it reads –TIP.
3. Insert the adapter's barrel plug into the SCP-83's **DC 3V** jack.
4. Plug the adapter into a standard AC outlet.

Connecting an AC adapter automatically disconnects internal battery power.

USING VEHICLE BATTERY POWER

You can power the SCP-83 from a vehicle's battery using an optional DC adapter, such as RadioShack Cat. No. 270-1560.

Cautions:

- The recommended DC adapter supplies 3 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the SCP-83's **DC 3V** jack. Using an adapter that does not meet these specifications could damage the SCP-83 or the adapter.
- Be sure the adapter is connected to the SCP-83 before you connect it to the cigarette-lighter socket and that you disconnect the adapter from the cigarette-lighter socket before you disconnect it from the SCP-83. Otherwise, the unconnected plug might touch some metal in the vehicle and damage the adapter.

Follow these steps to power the SCP-83 from a vehicle's battery.

1. Set the adapter's voltage switch to 3V.
2. Insert the adapter's 3.4 mm outer diameter/1.3 mm inner diameter barrel plug into the adapter's cord with the tip set to negative (–).
3. Insert the adapter's barrel plug into the SCP-83's **DC 3V** jack.
4. Plug the adapter into a vehicle's cigarette-lighter socket.

Connecting a DC adapter automatically disconnects internal battery power.

CONNECTING HEADPHONES/ SPEAKERS

You can enjoy the SCP-83's sound through its built-in monaural speaker. Or, you can connect stereo headphones or amplified speakers to the SCP-83 for stereo sound. Your local RadioShack store sells a wide variety of stereo headphones and amplified speakers.

Connect stereo headphones or amplified speakers with a 1/8-inch stereo plug to the **/ANT.** jack.

Note: Connecting headphones or external speakers automatically disconnects the internal speaker.

Listening Safely

To protect your hearing, follow these guidelines when you use headphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

Traffic Safety

Do not wear headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and is illegal in some areas.

Even though some headphones are designed to let you hear some outside sounds when listening at normal volume levels, they still present a traffic hazard.

CONNECTING THE ANTENNA

When not using headphones or amplified speakers, you can connect the supplied antenna for better reception of FM stations. When you connect headphones or amplified speakers, the headphones' or speakers' cord acts as the FM antenna, so be sure to fully extend the cord.

To connect the supplied antenna, insert its plug into **🎧 /ANT.**

USING THE BELT CLIP

The belt clip lets you keep your hands free while you listen to the SCP-83. To attach the belt clip, slide it into the slots on the back of the SCP-83 and push up until it latches in place.

To remove the belt clip, push down on the tab and slide it off in the direction of the arrow.

RADIO OPERATION

1. Set **TAPE . . RADIO** to **RADIO**.

2. Adjust **VOLUME** to the desired listening level.

3. Set **FM . . . AM** to select the desired band.

Position	Band
Left	FM STEREO
Center	FM MONO
Right	AM

4. Turn **TUNING** to select the desired station.

Notes:

- The AM antenna is built-in. Rotate the cassette player to improve AM reception. For the best FM reception, fully extend the supplied FM antenna wire or extend the headphones' cord when you use headphones.

- The FM STEREO indicator lights when the SCP-83 receives an FM broadcast in stereo.
- To improve reception of weak FM radio stations, set **FM . . . AM** to the center position to select the FM monaural band. The sound is no longer in stereo, but reception should improve.

5. Set **E . BASS** to s**ON** for an enhanced bass effect. Set it to t**OFF** for normal bass sound.

6. Set **TAPE . . RADIO** to **TAPE** to turn off the radio.

CASSETTE OPERATION

PLAYING A CASSETTE TAPE

1. Take up any slack in the tape by turning the cassette's hub with a pencil. Do not touch the exposed tape.

2. Pull open the cassette compartment door.

3. With its open edge facing up, insert the cassette tape into the cassette guides.

4. Close the door.
5. Set **TAPE . . RADIO** to **TAPE**.

6. Press **PLAY** until it clicks. The entire cassette tape repeatedly plays.

Note: The tape automatically plays the other side when the current side ends. To manually change the tape side, set **DIRECTION** to its other position.

7. Adjust **VOLUME** to the desired listening level.

8. Set **E . BASS** to s**ON** for an enhanced bass effect. Set it to t**OFF** for normal bass sound.

9. To stop playback, press **STOP**.

USING FAST-FORWARD AND REWIND

To fast-forward the tape, press ►► or ◄◄ (whichever is the same direction as tape play). To rewind the tape, press ►► or ◄◄ (whichever is the opposite direction of tape play.)

The tape automatically stops when it reaches the end (but you need to press **STOP** to release ▶▶ or ◀◀). To stop fast-forwarding or rewinding the tape earlier, press **STOP**.

TAPE TIPS

Tape Quality

For the best performance, use only regular length (60- or 90-minute) cassette tapes. We do not recommend long-playing cassette tapes, such as C-120s, because they are extremely thin and can easily tangle in the playback mechanism.

Restoring Tape Tension and Sound Quality

After you play a cassette tape several times, the tape might become tightly wound on the reels. This can cause playback sound quality to deteriorate.

To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely rewind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

Caution: Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.

Cleaning the Tape-Handling Parts

Dirt, dust, or particles of the tape's coating can accumulate on the tape head and other parts that the tape touches. This can reduce the SCP-83's performance.

Follow these steps to clean the tape-handling parts after about every 20 hours of tape player operation.

1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door.
3. Press **PLAY** to expose the tape-handling parts.

4. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the playback head, pinch rollers, capstans and tape guides.

5. When you finish cleaning, press **STOP** and close the compartment, then reconnect power.

Note: Your local RadioShack store has a complete line of cassette deck cleaning accessories.

MAINTENANCE

Your Optimus SCP-83 Auto-Reverse AM•FM Stereo Cassette Player is an example of superior design and craftsmanship. The following suggestions will help you care for the SCP-83 so you can enjoy it for years.

- Keep the SCP-83 dry. If it gets wet, wipe it dry immediately.
- Use and store the SCP-83 only in normal temperature environments.
- Handle the SCP-83 gently and carefully. Don't drop it.
- Keep the SCP-83 away from dust and dirt.
- Occasionally wipe the SCP-83 with a damp cloth to keep it looking new.

Modifying or tampering with the SCP-83's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your SCP-83 is not performing as it should, take it to your local RadioShack store for assistance.

FCC INFORMATION

The SCP-83 complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your SCP-83 might cause TV or radio interference even when it is operating properly. To see if your SCP-83 is causing the interference, turn it off. If the interference goes away, your SCP-83 is causing it. To eliminate interference, try the following:

- Increase the distance between the SCP-83 and the radio or TV.
- Use outlets on different electrical circuits for the SCP-83 and the radio or TV.

Consult your local RadioShack store if the problem still exists.

SPECIFICATIONS

GENERAL

Power Requirements ..... 3 Volts DC
Two AA Batteries (Cat. No. 23-557),
3-Volt AC Adapter (Cat. No. 273-1654), or
3-Volt DC Adapter (Cat. No. 270-1560)

Battery Life (Alkaline Batteries) ..... 10 Hours

Dimensions .....5.08 ¥ 3.46 ¥ 1.54 Inches
(129 ¥ 88 ¥ 39 mm)

Weight (Without Batteries) ..... 8.8 oz
(249 g)

RADIO

AM:

Frequency Range ..... 530–1710 kHz Sensitivity
@ 20dB

S/N ..... 800 µV/m Selectivity ± 10 kHz 18 dB

Headphone Output Power @ 10% THD .....10 mW

Speaker Output Power @ 10% THD ..... 30 mW

FM:

Frequency Range ..... 88–108 MHz

Usable Sensitivity ..... 15 mW

Output Power @ 10 % THD..... 10 mW

Selectivity ± 400 kHz ..... 15 dB

CASSETTE PLAYER

Tape System ..... 4-Track, Stereo

Tape Speed .....$1^7/_8$ Inches per Second

Frequency Response..... 125 Hz–6.3 kHz ±3dB

Signal-to-Noise Ratio ..... 40 dB

Wow and Flutter 0.4%

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

NOTES

RadioShack Limited Warranty

This product is warranted against defects for 90 days from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your RadioShack sales slip** as proof of purchase date to any RadioShack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

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